

Patent Application of

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For

**TITLE: NECKTIE KNOT SIMULATOR**

**CROSS-REFERENCE TO RELATED APPLICATIONS**

N/A

**FEDERALLY SPONSORED RESEARCH**

N/A

**SEQUENCE LISTING OR PROGRAM**

N/A

**BACKGROUND OF THE INVENTION**

**FIELD OF THE INVENTION**

The present invention relates generally to a necktie knot simulator. More specifically,

the invention concerns a knot simulator that allows the wearer the convenience of not having to tie a knot when wearing a necktie.

## DISCUSSION OF PRIOR ART

There have, over the years, been many attempts to introduce a commercially accepted clasp or knot simulator for a necktie. Basically there have been two approaches. One approach has been a clasp that the wearer places over a pre-knotted necktie. With this approach the wearer is still required to tie a knot. The clasp in this approach basically amounts to a decorative cover. The second approach has been to configure the clasp to preclude the necessity of having to tie a knot.

U.S. Patent No. 6,094,746 issued to Miller on Aug. 1, 2000 is an example of Prior Art that offers the user the option of either pre-tying a knot or threading the tie through designated openings.

U.S. Patent No. 2,316,002 issued to Koivisto on Jul. 7, 1941 teaches an example of Prior Art that is placed over a pre-tied knot.

U. S. Patent No. 2,714,719 issued to Peake on Sept. 9, 1955 is another Prior Art example of a knot protector that is placed over a pre-tied knot.

The Prior Art discussed above employs the first approach to a knot simulator. By design, these examples must be larger than the knot that they are intended to cover. With the necktie primarily being a fashion statement, the public has been reluctant to embrace any device that appears conspicuously larger than a standard knot.

The second design approach found in Prior Art attempts to construct a knot simulator or clasp in a manner that precludes the necessity of having to tie a knot.

U. S. Patent No. 5,216,757 issued to Dorkin on June 8, 1993 discloses a design with a single opening on the top. The clasp also pre-folds the tie in a somewhat unnatural manner. The use of a hinge and pin to secure the tie add to the manufacturing cost.

U. S. Patent No. 5,953,755 issued to Barylski on Sep. 21, 1999 discloses a design incorporating the single opening at the top approach.

U. S. Patent No. 5,493,731 issued to Amnott on Feb. 27, 1996 teaches a solution with two opening at the top. While this might be an improvement over the single opening at the top approach, the two openings in an unnatural appearance direct the tie up the neck instead of around the collar.

U. S. Patent No. 5,035,002 issued to Knight Jr. on June 30, 1991 discloses another solution with a single opening at the top.

U.S. Patent No. 4,748,692 issued to Fukushima on June 7, 1988 teaches a solution complicated with an elaborate latching system and a single opening at the top.

U. S. Patent No. 3,999,222 issued to Walborn on Dec. 22, 1976 teaches a solution similar to Amnott U. S. Patent No. 5,493,731 where two top openings direct the tie straight up the neck rather than around the collar.

U. S. Patent No. 3,964,105 issued to Gideon on June 22, 1976 discloses a complicated design with three separate fastening devices fastened to a shield like knot simulator.

U. S. Patent No. 3,745,614 issued to Tsang on July 17, 1973 discloses a solution where the complexities of manufacture could render the object expensive to manufacture.

U. S. Patent No. 2,787,002 issued to De La Piedra on Apr. 2, 1957 reveals the often-employed approach of having only one large opening at the top.

U. S. Patent No. 2,654,095 issued to Gougen on Jan. 3, 1952 discloses another one

opening at the top solution that is rather complicated consisting of multiple parts.

U. S. Patent No. 2,617,108 issued to Anzell on Nov. 11, 1952 teaches still another single opening at the top approach.

In summary, this second design approach teaches one common solution. These Prior Art examples have a section of a tie that exits the top of the device. With this solution the section of the tie that exits the top of the device must be redirected from a north south orientation in order to wrap around the wearers collar. It is probable that a portion of the tie above the device will be visible before it turns behind the collar.

Additional design approaches can be discovered in Prior Art:

U.S. Patent No. 4,573,219 issued to Hooten on Mar. 4, 1986 reveals a device that provides channels to thread a tie through. This solution includes a solid back and does not give the wearer the option of including a fold in the tie where it exits the lower aperture. The upper right and upper left apertures are described as sloped shoulders. These shoulders appear to be too narrow to conceal the tie as it exits the devise and make its way around the collar.

U. S. Patent No. 5,920,907 issued to Pierce on July 13, 1999 teaches a clasp that offers a system where interchangeable decorative surface attachments are employed.

## OBJECTS AND ADVANTAGES

It is thus the object of the present invention to produce a necktie knot simulator. It is a further object of this invention to produce a necktie knot simulator that resembles the actual appearance of a conventionally tied knot. This appearance is achieved by casting or manufacturing the necktie knot simulator in such a manner that the upper right and upper left side wall apertures are positioned sufficiently far apart from each other to ensure that they

will be covered by a shirt collar. With both apertures covered by said shirt collar, the user can will assured that no section of the necktie above the necktie knot simulator will be visible.

A further object of the invention is to provide three apertures of sufficient diameter and length to provide frictional resistance to ensure the invention remains in place on the necktie.

It is further an object of the invention to provide a necktie knot simulator that is economical to manufacture.

It is still further an object of the invention to provide a variety of designs or patterns on the front surface of the invention. In addition the invention may be produced in any number of materials including but not limited to silver, gold, plastic, and titanium.

It is still further an object of the invention to provide for the application of precious or semi-precious stones to the front surface.

## SUMMARY

The present invention accomplishes the above stated objectives, as well as others, as may be determined by a fair reading and interpretation of the entire specifications.

## DRAWINGS FIGURES

For a further understanding of the nature and objects of the present invention, reference should be had to the following detailed descriptions, taken in conjunction with the accompanying drawings, in which like elements are given the same or analogous reference numbers and wherein:

FIG. 1 is a perspective view of the backside of the necktie knot simulator;

FIG. 2 is a side elevation view of the necktie knot simulator of FIG. 1 illustrating the addition of a precious or semi-precious stone mounted to the front surface;

FIG. 3 is a front elevation view of the necktie knot simulator of FIG. 1 illustrating a preferred appearance of the invention when in use with a necktie;

FIG. 4 is a rear elevation view of the necktie knot simulator of FIG. 1 illustrating a preferred use of the invention with a necktie passing through the three apertures;

FIG. 5 is a front elevation view of the necktie knot simulator of FIG. 1 illustrating the addition of a precious or semi-precious stone to the front surface.

## DETAILED DESCRIPTION - PREFERRED EMBODIMENTS

As required, detailed embodiments of the present invention are disclosed herein. It is to be understood that the enclosed embodiments are merely exemplary of the invention that may be embodied in various forms. Therefore, specific structural and functional details disclosed herein are not to be interpreted as limiting, but merely as a basis for the claims and as a representative basis for teaching one skilled in the art to variously employ the present invention in virtually any appropriately detailed structure.

Reference is now made to the drawings, wherein like characteristics and features of the present invention shown in the various FIGURES are designated by the same reference numerals.

FIG. 1 illustrates a knot simulator 10 as seen from the rear. Knot simulator 10 consists of a triangular-shaped body composed of a front surface 12, two side walls 14a and 14b, and a top wall 16 which extends between two side wall apertures 18a and 18b. Both side walls 14a and 14b as well as the top wall 16 are slightly rounded, presenting an accurate profile, enhancing the appearance. At the bottom of knot simulator 10, the two side walls 14a and 14b and the front surface 12 make up three fourths of the bottom aperture 20. With a small bridge 22, we

provide the fourth side to complete the bottom aperture 20. The front surface 12, the two side walls 14a and 14b, and the small bridge 22 while listed as sides of the bottom aperture 20, in practice consist of four segments of a circle. The same practice will be observed at the two side wall apertures 18a and 18b. The side wall 14a, the front surface 12, and the top wall 16 make up three fourths of aperture 18a. With a small bridge 24a, we provide the fourth side to complete the aperture 18a. The side wall 14b, the front surface 12, and the top wall 16 make up three fourths of aperture 18b. With a small bridge 24b, we provide the fourth side to complete the aperture 18b. Similar to bottom aperture 20, both side wall aperture 18a and side wall aperture 18b are composed of four sides that combine to form a circle.

FIG. 2 illustrates a second embodiment of the knot simulator 10 of FIG. 1. This second embodiment illustrates the addition of a precious or semi-precious gemstone 32. One technique for mounting a precious or semi-precious gemstone 32 would be the use of a bezel 30. FIG. 2 also illustrates a curvature of the front surface 12 further enhancing the natural appearance of the knot simulator 10.

FIG. 3 illustrates a third embodiment of the knot simulator 10 of FIG. 1. This third embodiment illustrates a design carved into the front surface 12. FIG. 3 also illustrates the left side wall aperture 18a covered by a shirt collar 30a and the right side wall aperture 18b also covered by a shirt collar 30b. One of the critical design features of knot simulator 10 is the fact that the left side wall aperture 18a and right side wall aperture 18b are sufficiently far apart to ensure the shirt collar 30a and 30b will cover said side wall apertures 18a and 18b. Side wall aperture 18a and side wall aperture 18b will be approximately 35mm to 40 mm apart. The thickness of the knot simulator 10 will generally be uniform. With different

materials this thickness will vary. In the first embodiment where the material used to manufacture the knot simulator 10 is sterling silver, the thickness is approximately 1mm. It will also be a requirement that side wall aperture 18a, side wall aperture 18b, and the bottom aperture 20 be of accurate diameter and length to provide frictional resistance. A necktie 38 will dictate the actual required diameters. The current widths and material of choice, find that the right side wall aperture 18a and left side wall aperture 18b have a diameter range of 35mm to 40mm. The lower aperture 20 having both tails of the necktie 38 passing through will have a larger diameter of approximately 45mm to 50mm. The length of both side wall apertures 18a and 18b and the lower aperture 20 will be dependent on the necktie 38. Currently an optimal length will be in the range of 12mm to 20mm. Historically, necktie widths have changed over time. It will be necessary to resize the three apertures 18a, 18b, and 20 to accommodate the changing fashion dictates of the industry.

FIG. 4 further illustrates the necktie 38 and how it is properly threaded through the knot simulator 10. The user begins by grasping the narrow end of the necktie 38 and passing it through the bottom of the lower aperture 20 into the knot simulator 10. The necktie 38 is then passed through side aperture 18a and out of the knot simulator 10. The user then creates a loop with the necktie 38 and passes the narrow end of the necktie 38 through side wall aperture 18b and back into the knot simulator 10. Next, the narrow end of the necktie 38 is passed through the lower aperture 20 and out of the knot simulator 10. Finally the knot simulator 10 and necktie 38 are placed under the collar 30, the ends are adjusted, and the knot simulator 10 is slid up snug so that the side apertures 18a and 18b are hidden by the shirt collars 30a and 30b.

FIG. 5 further illustrates the second embodiment of FIG. 1 where the bezel 30 and precious or semi-precious stone 32 are illustrated in a front view. In all embodiments one or more designs, symbols, patterns, logos, lettering, or other indicia (collectively referred to as "indicia") as well as bezel 30 mounted precious or semi-precious stones 32 can be provided on at least the front surface 12 of the knot simulator 10.

While the present invention has been illustrated and described in detail in the drawings and foregoing description, the same is to be considered as illustrative and not restrictive in character, and that all changes and modifications that come within the spirit of the invention are desired to be protected. With respect to the above description then, it is to be realized that the optimum dimensional relationships for the knot simulator 10, will vary over time and accordingly one skilled in the art shall make dimensional adjustments accordingly. The instant invention has been shown and described herein in what is considered to be the most practical and preferred embodiment. It is recognized, however, that departures may be made therefrom within the scope of the invention and that all obvious modifications will occur to a person skilled in the art.